

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for supplying zinc ions to an alkaline zinc plating bath, comprising the steps of bringing a source of zinc ions in the form of grains or chips and a zinc dissolution accelerating metal in the form of grains or chips into electrically direct or indirect contact with each other in a same vessel or separate vessels, and shaking, vibrating, or rotating the vessel or the separate vessels containing the source of zinc ions and the zinc dissolution accelerating metal in a plating solution in order to accelerate zinc dissolution from the source of zinc ions by mutual friction of the grains or the chips in the vessel(s).

2. (Previously Presented) The method according to claim 1, comprising placing the source of zinc ions and the zinc dissolution accelerating metal in a same vessel, and bringing the source of zinc ions and the zinc dissolution accelerating metal into direct contact with each other and moving in the vessel in the plating solution by shaking, vibrating or rotating the vessel in order to accelerate zinc dissolution.

3. (Previously Presented) The method according to claim 1, comprising placing the source of zinc ions and the zinc dissolution accelerating metal in different vessels, connected via an electric conductor, and moving the source of zinc ions and the zinc dissolution accelerating metal in the vessels in the plating solution by shaking, vibrating or rotating the vessels in order to accelerate zinc dissolution.

4. (Previously Presented) The method according to claim 1, wherein the source of zinc ions comprises at least one of zinc and zinc alloy, and the zinc dissolution accelerating metal comprises 1) metal that is more electropositive than zinc, 2) metal that is more electropositive than zinc, with which one or more of iron, cobalt, nickel, carbon, silicon, manganese, chromium, molybdenum and tungsten are contacted, 3) metal that is more electropositive than zinc, in which one or more of iron, cobalt, nickel, carbon, silicon, manganese, chromium, molybdenum and tungsten are dispersed, 4) alloy comprising metal that is more electropositive than zinc and one or more of iron, cobalt, nickel, carbon, silicon, manganese, chromium, molybdenum and tungsten, or 5) a composite or mixture of two or more members selected from above 1) to 4).

5. (Previously Presented) The method according to claim 1, comprising controlling a degree of contact of at least one of the source of zinc ions and the zinc dissolution accelerating metal with the plating solution in response to an analysis of a zinc ion concentration in the plating solution to adjust the zinc ion concentration in the plating solution.

6. (Previously Presented) The method according to claim 4, comprising controlling the degree of contact of at least one of the source of zinc ions and the zinc dissolution accelerating metal with the plating solution in response to the analysis of the zinc ion concentration in the plating solution to adjust the zinc ion concentration in the plating solution.

7. (Previously Presented) The method of claim 4, wherein the source of zinc ions comprise at least one of zinc and zinc alloy whose surface is plated or contacted with metal that is more electropositive than zinc.